



JEEP JK4 STEP SLIDER INSTALLATION BD-SS-100-JK4



PARTS LIST



QTY	DESCRIPTION
1	Drivers Side Slider Assembly
1	Passenger Side Slider Assembly
1	Wiring Harness and Fuse
1	Double Sided Sticky Squares and Alcohol Pad
1	Cut Off Switch
1	Anti-Seize Packet
1	Control Box
2	Aluminum Spacers
2	Large Washers
2	Grip Tape Strips
2	130mm Bolts
4	Actuating Magnets and Door Sensors
10	7/16" Washers
10	Aluminum Nutserts
10	5/16" SS Button Head Bolts
10	5/16" Stainless Steel Washers

*Optional: 2 LED Light Strips

*If any parts listed are missing or damaged please call Rock-Slide Engineering @
435-752-4580 prior to installation

STEP SLIDER INSTALLATION

- 1) Remove the stock rocker guards if equipped
- 2) Remove the front body bolts on the driver and passenger side (under the front door)
- 3) Loosen the rear body bolts (under rear passenger doors)
- 4) **DO NOT REMOVE THESE BOLTS!** You will need these bolts to support the slider you are about to put into place on the Jeep



- 5) Replace the front body bolts on the driver and passenger sides with the 130mm bolt, aluminum spacer, and large washer in same sequence as the picture below indicates
 - a) **DO NOT** completely tighten the bolts, but leave them loose to reflect the same looseness of the 2 rear bolts so you can fit the slider forks into these slots



- 6) Move the slider into it's position on the Jeep
 - a) You may want some help so that you can support the weight of the slider
 - b) Take extra care when positioning the slider on the Jeep to prevent any scratching or marring of the painted surface

- 7) Insert the 3 slider forks into the 3 body mount bolt slots
 - a) The slider should fit tight to the Jeep's rocker side
- 8) The top side of the slider should be at a flat 90 degree angle even with the front and rear wheel wells of the Jeep
- 9) Tighten all body mount bolts to help bring the slider into position on the Jeep
- 10) This will be the final position of the slider so verify it's straight, level, even on both sides and you are satisfied with the slider's layout
- 11) Carefully drill a 7/32" pilot hole into the center of the holes on the slider into the Jeep's rocker side
 - a) *****It is extremely important these holes are drilled precisely to insure the slider will fit properly once the nutserts have been installed***
 - a) The body sides are very thin metal so let the drill bit do the work. Don't push too hard on the drill or possible sheet metal damages may occur
- 12) Loosen the body mount bolts and remove the slider from the Jeep
 - a) You may want some help so that you can support the weight of the slider
- 13) From the center of the pilot hole, step up the hole size using a 17/32" bit to create a finish hole that will be used to install the nutserts
- 14) Install 5 nutserts per side in the holes that were just drilled into the body of the Jeep
 - a) We suggest using a crimping tool to optimize the integrity of the nutserts to support the slider
- 15) If no crimping tool is available, follow these instructions
 - a) Install by using a 5/16"x1.125" minimum length bolt with a 3/8" nut
 - b) Put a small amount of grease on the bolt to reduce friction
 - c) Hold the nut steady with an end wrench so the flange of the insert is flush against the body panel
 - d) Tighten the bolt against the nut to crimp the nutsert into place
 - e) If the nutsert is rotating, place a star-lock washer between the 3/8" nut and nutsert
 - f) Once the nutsert is crimped into place completely back out the bolt
 - g) If the nutsert ever breaks loose and spins, repeat the process and crimp it tighter to prevent spinning



(Nutserts that have been installed correctly)

- 16) Lift the slider into its final position by inserting the 3 forks on the slider onto the 3 body mount bolts and aligning it against the Jeep rocker face
- 17) Make sure the actuator wire is free from being pinched between the frame
- 18) Attach the slider to the rocker face using the 5/16" button head bolts & washers
- 19) Start from the center of the slider and work out towards the ends
- 20) Apply a small amount of anti-seize to the threads of each bolt
- 21) You will be using 5 bolts/washers per side
 - a) We recommend tightening the button heads by hand to prevent any damage to the head of the bolt
- 22) Tighten the body mount bolts beneath the Jeep to fully secure the slider
- 23) Make sure the spacer is in between the body and the slider on the front body mount
- 24) The body mount bolts need to be **SNUG** to the Jeep frame but **DO NOT OVER TIGHTEN** the body mount bolts. Over tightening these bolts could create a friction point causing the slider to not operate optimally
- 25) Double check all bolts to verify components and hardware are installed correctly and securely to the Jeep

******Please note: Expect some variance in parts that may require you to adjust the tension of bolts to make parts fit correctly and properly. Once all parts are installed, we suggest then fully tightening all bolts again to fit securely******

If you have any questions please contact Rock-Slide Engineering @ 435-752-4580

WIRING HARNESS INSTALL



Step Slider Wiring Diagram

<u>Driver Side</u>	<u>Wire Color</u>	<u>Passenger Side</u>	<u>Wire Color</u>
Front Door Sensor	Orange/Yellow	Front Door Sensor	Green/Gray
Rear Door Sensor	Orange/Pink	Door Sensor	Blue/White
Driver LED Light	Brown/Tan	Passenger LED Light	Pink/Tan
Driver Actuator	Red/Black	Passenger Actuator	Red/Black

****WARNING****

REMOVE FUSE FROM WIRING HARNESS PRIOR TO INSTALLATION! CONNECTING THE HARNESS TO THE POWER SOURCE WITH THE FUSE ATTACHED WILL SHORT OUT THE WIRING HARNESS

NEVER ALLOW THE DOOR SENSOR TO COME INTO DIRECT CONTACT WITH THE ACTUATING MAGNET. THIS WILL DESTROY THE SENSOR MAKING IT UNUSABLE

- Remove the “B” pillar covers on both driver and passenger and driver sides
- Roll the carpet back underneath the rear seat to expose the floor boards
- Position the control box under the rear seat on the passenger side
 - It’s recommended that you mount the control box under the rear passenger seat because it’s out of sight and in a secure location so it will not come into contact with anything or be kicked by a rear seat passenger (see below)



- Plug the harness into the control box and lay the harness wire into position in the Jeep starting on the rear passenger side
 - You will want to divide the harness between the rear seats, the front passenger seat and finish with the driver door. This will reveal how you will be able to conceal the harness under the carpet when your done
- Once the harness is positioned in its proposed layout you will need to gain access to the slider outside the Jeep to power the slider.
- Starting on the rear passenger side, locate the drain plug and drill a small hole into it to allow you to run the actuator wires to the slider (see below)
 - Once the actuator is run to the slider you can put some silicon sealant around the drilled hole to prevent any elements from entering, but it’s not required



- Route the actuator wire around the backside of the slider and plug the red/black connector into the slider
 - Actuator wire must be wired around the backside of slider so it's protected from the elements and will not be severed off during off-road activity
 - Secure wires to minimize slack so they are protected. We recommend zip ties
 - *Optional: The pink/tan wire is used if LED light package is being installed
- Inside the Jeep, route the rear passenger door sensor wire along the doorframe; and using a sticky pad, mount the sensor underneath the door latch
 - Connect the blue/white wire to the door sensor
 - Place a small piece of electrical tape on the sensor wire to secure (see below)



- While moving to the front passenger door, run the harness along the side of the Jeep's tub and route the front passenger door sensor wire up the "B" pillar of passenger door; and using a sticky pad, mount the sensor underneath the door latch
 - Connect the green/grey wire to door sensor
 - Place a small piece of electrical tape on the sensor wire to secure
- Returning to the backseat, locate the drain plug on the rear driver side and drill a small hole into it to allow you to run the actuator wires to the slider
 - Once the actuator is run to the slider you can put some silicon sealant around the drilled hole to prevent any elements from entering, but it's not required
- Route the actuator wire around the backside of the slider and plug the red/black connector into the slider
 - Actuator wire must be wired around the backside of slider so it's protected from the elements and will not be severed off during off-road activity
 - Secure wires to minimize slack so they are protected. We recommend zip ties
 - *Optional: The brown/tan wire is used if LED light package is being installed
- Route the rear passenger door sensor wire along the doorframe; and using a sticky pad, mount the sensor underneath the door latch
 - Connect the blue/white wire to the door sensor
 - Place a small piece of electrical tape on the sensor wire to secure
- Continue to route the harness wires along the lower doorframe on the tub, and just like performed on the passenger side route the door sensor wire along the "B" pillar up the doorframe and using another sticky pad, mount the sensor below the door hatch.
 - Connect the orange/yellow wire to the door sensor
 - Place a small piece of electrical tape on the sensor wire to secure

- Remove the driver side dash panel and drill a 18mm hole in the panel to accommodate the cutoff switch
 - You can mount the cutoff switch in multiple positions. We recommend the dash panel simply for the ease of access (see below)



- Mount the ground from the cutoff switch to a metal surface behind dash panel (below)



- Route the cutoff switch wires by running the POS+ and NEG- wires up the driver side "A" pillar and plug them into the back of the cutoff switch
- Route the remaining POS+ and NEG- wires through the firewall on the driver's side into the engine compartment.
 - Make sure there is **NO INTERFERENCE** with any of the pedal linkage under the dash
- Route these wires along the firewall up to the battery compartment
 - Secure the wires using the harness attached to the firewall
- Attach the NEG- to the NEG- side of the battery
- Attach the POS+ to the POS+ side of the battery
- Position the actuating magnets on the catch side of each door



- Make sure the actuating magnets are in perfect line with the sensors
- ****DO NOT allow the magnet and sensor to come into direct contact. This will destroy the sensor making it unusable****

- Once that proper placement is achieved we recommend using a permanent marker to outline the magnet on the door.
- Re-check all wires to make sure they are completely secure and free from coming into contact with any moving part to prevent system damage due to a cut wire
- Reinstall all internal plastic and carpet pieces that were removed.
- Make sure that all wires are tucked back and out of heavy traffic areas on the floor.
 - Route them toward the furthest back area underneath the rear seat
- Close all doors
- Insert the fuse into the holder on the POS+ side of the battery
- Test all doors to make sure the step deploys each time a door is opened, and retracts when the door is closed



MAINTENANCE OF THE STEP SLIDER

- Please note the slider is a mechanical mechanism that requires maintenance to operate properly. To keep the slider operating at an optimal level it needs to be maintained with lubrication. We recommend using a Teflon based lubrication on the 7 indicated points below to keep the slider operating smoothly. A good rule of thumb is every month. Heavy trail use will increase the frequency in lubrication.



LUBRICATE THE HINGE POINTS:

- 2- HINGE POINTS ON THE STEP PORTION ON THE BACK SIDE
- 4-HINGE POINTS IN THE BODY OF THE SLIDER (ALUMINUM BLOCKS)
- 1-LUBRICATE THE MOTOR SHAFT LIGHTLY SO IT CAN TRANSFER THE LUBRICANT TO THE O-RINGS AS IT RETRACTS

TROUBLE SHOOTING/FRICTION POINTS

- The slider is powered by the Jeep's battery when engine is off and powered by the Jeep's engine while the vehicle is running. This will cause the slider to operate at different speeds depending on the Jeep engine is running or not.
- If you feel the slider is sticking at certain points or the motor is stressing it may be possible a friction point has developed during the install due to a variance in the slider or Jeep construction
 - To identify a friction point that may be stressing the slider motor, look at the slider from outside the jeep and open and shut the Jeep door a couple of times and study the way the slider operates. Look at the slider for wear in the powder coating. The slider leaves our manufacturing facility with a perfect powder coating so if you see a spot on the slider that has scratches or the powder coating shows a blemish; that's a good indication of a friction point. Using a file or other grinding tool to smooth over a small area on the slider can alleviate this problem.

Thank you for choosing Rock-Slide Engineering products. We value your business and welcome your feedback/suggestions. If you have any concerns please contact us directly at 435-752-4580. We are here to help you!